

To: Way, Steven[way.steven@epa.gov]
From: Petri, Elliott
Sent: Wed 7/1/2015 7:54:57 PM
Subject: RE: Red and Bonita - Extended Pond Capacity and Liner Calculations
RnB - Pond Expansion Layout - 20ft Expand.pdf
Red and Bonita RV - SAP - Figures.pdf

Hi Steve,

Here is the revised figure to show a 20 foot extension in length. I have re-run the numbers and the retention time would be 3.6 Hours as opposed to the 3.3 hours with just the 15ft expansion.

I have also included the figure that shows the work locations for RnB and Shows the water sampling sites minus the silver ledge, let me know what else you would need on these figures.

Thanks,
Elliott

Elliott Petri, PE

Weston Solutions, Inc.

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From: Way, Steven [mailto:way.steven@epa.gov]
Sent: Wednesday, July 01, 2015 12:43 PM
To: Petri, Elliott
Subject: RE: Red and Bonita - Extended Pond Capacity and Liner Calculations

Elliott, I am inclined to push to the north another 5 ft to gain a little more retention and storage for the solids. I am not sure if your calculation on retention time accounts for the 4 x 3 x 300 feet of precipitate (@ 130 cy) we lose once the adit is mucked.

So, let's talk about where the current layout / cut takes us relative to the wood debris. Assuming we go this way, please modify the drawing to reflect that, and I'll send to Matt and Pete.

Thanks,

Steve

Steven Way

Federal On-Scene Coordinator

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US EPA - Region 8

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From: Petri, Elliott [<mailto:Elliott.Petri@WestonSolutions.com>]

Sent: Wednesday, July 01, 2015 11:04 AM

To: Way, Steven

Cc: Christner, Jan

Subject: RE: Red and Bonita - Extended Pond Capacity and Liner Calculations

Hi Steve,

I have revised the pond calculations to account for the higher flow we found on site this year (500 GPM), I have also attached a draft drawing of the pond expansion per our discussions on site. With the increased flow the overall retention time for the expanded pond dropped from 5.5 hours to 3.3 hours. Naturally the longer the water is in the ponds the better the quality will be, but with the limited space to the north the proposed option in the word document is still considered the best option. Please review the attached document and figure and send me any edits or comments you have on either.

Thanks,
Elliott

Elliott Petri, PE

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From: Petri, Elliott

Sent: Tuesday, April 14, 2015 4:34 PM

To: Way, Steven (way.steven@epa.gov)

Cc: Christner, Jan

Subject: Red and Bonita - Extended Pond Capacity and Liner Calculations

Hi Steve,

Please find attached a word document outlining the capacity options for the expanded pond and an estimate for the liner required for the expanded pond. The current pond dimensions were estimated from google earth imagery to match the final product as built in the field. Also, if needed I can provide you with calculations for lining the current pond with higher berms or extending the pond without adding a third internal berm.

Please let me know if you have any questions or need additional information on the treatment pond options.

Thank You,

Elliott

Elliott Petri, PE

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